



Product Bulletin No. 3092

New Cisco IOS Software Release 12.2(25)SED for Cisco Catalyst 3750, Catalyst 3560, Catalyst 3550, Catalyst 2970 & Catalyst 2960 Series Switches and Cisco Gigabit Ethernet Switch Module (CGESM)

Cisco Systems® announces Cisco IOS® Software updates for Cisco® Catalyst® 3750, Catalyst 3560, Catalyst 3550, Catalyst 2970 & Catalyst 2960 series Intelligent Ethernet switches and Cisco Gigabit Ethernet Switch Module (CGESM). This new release furthers Cisco leadership in providing secure, reliable, and feature-rich LAN switching solutions.

The Cisco Gigabit Ethernet Switch Module (CGESM) is an integrated OEM Ethernet blade switch from Cisco built for the HP BladeSystem chassis.

OVERVIEW

This product bulletin contains content and delivery information for Cisco IOS Software Release 12.2(25)SED.

The following new features are available with Cisco IOS Software Release 12.2(25)SED:

- **802.1x Auth-Fail-VLAN**—Allows end devices that fail 802.1x authentication to be placed into a VLAN of choice. 802.1x starts the re-authentication timer in auth-fail-vlan state and it continues asking the end device for its authentication credentials upon expiry of the re-authentication timer. Once the end device is properly authenticated the switch port moves to the VLAN specified within the AAA response. If the end device is not authenticated, the switch port stays in its current auth-fail-vlan state.
- **802.1x Auth-Fail-Open**—Provides a way for the network administrator to configure “critical” ports that are allowed access to the network if the 802.1x authentication process cannot reach any of the configured AAA servers. This feature is also known as “Critical Auth” or “AAA-Down”.
- **IPv6 Multicast Listener Discovery (MLD) Snooping**—Is the protocol used by IPv6 hosts to register with multicast groups. MLD Snooping provides similar functionality for IPv6 that IGMP Snooping provides for IPv4.
- **IPv6 ACL**—Support for IPv6 Router ACLs (RACLs) and Port ACLs (PACLs).
- **IPv6 Host Support**—Ability for the switch to support basic IPv6 capabilities such as ‘IPv6 Ping, IPv6 Telnet, IPv6 Traceroute’ and allow users to connect to the switch over IPv6 for basic management and configuration of IPv6 capabilities.
- **Access SDM Template**—Increases the number of Security and QoS ACLs on the 3750 and 3560 switches, to be consistent with the 3550.
 - Desktop = Security—2K and QoS—512
 - Aggregator = Security—4K and QoS—784
- **Per VLAN QoS**—Provides more granularity in applying QoS policy to multiple flows on a Per VLAN basis. Enables the 3750 and 3560 to be more consistent with the 3550. Previously a single policer was supported per port, and now a customer can configure multiple.
- **Flex Links Bi-Directional Fast Convergence**—Improves the downstream convergence time for Flex Links ports by triggering the upstream switch to flush its MAC address. The message is sent after Flex Links failover. With the MAC address table flushed the next packet downstream will be flooded out all ports re-building MAC address table.
- **EIGRP-VRF Lite**—Allows EIGRP to route into a Virtual Routing & Forwarding (VRF) domain.

Table 1. Cisco IOS Software Release 12.2(25)SED New Features

Feature	Cisco Catalyst 3750 Series Advanced Services	Cisco Catalyst 3750 Series IP Services	Cisco Catalyst 3750 Series IP Base	Cisco Catalyst 3560 Series Advanced Services	Cisco Catalyst 3560 Series IP Services	Cisco Catalyst 3560 Series IP Base	Cisco Catalyst 3550 Series IP Services	Cisco Catalyst 3550 Series IP Base	Cisco Catalyst 2970 Series LAN Base	Cisco Catalyst 2960 Series LAN Base	Cisco Gigabit Ethernet Switch Module (CGESM)
802.1x Auth Fail VLAN	X	X	X	X	X	X	X	X	X	X	X
802.1X Auth Fail-Open	X	X	X	X	X	X	N	N	N	N	N
IPv6 MLD Snooping	X	X	X	X	X	X	N	N	N	N	N
IPv6 ACL	X	N	N	X	N	N	N	N	N	N	N
IPv6 Host Support	X	X	X	X	X	X	N	N	N	N	N
Access SDM Template	X	X	X	X	X	X	E	E	N	N	N
Per Port Per VLAN Policing	X	X	X	X	X	X	E	E	N	N	N
Flex Link Bi Directional Fast Convergence	X	X	X	X	X	X	N	N	X	X	X
EIGRP-VRF-Lite	N	N	N	N	N	N	X	N	N	N	N

N = No plans to add platform support for this feature

X = Feature is new for this platform

E = Feature exists for this platform

Table 2 lists the Cisco Catalyst switches supported with this software release.

Table 2. Cisco Catalyst Switches Supported with Cisco IOS Software Release 12.2(25)SED

Cisco Catalyst 3750 and Catalyst 3560 Series License CD Part Numbers	Cisco Catalyst 3750 Series IP Services Part Numbers	Cisco Catalyst 3750 Series IP Base Part Numbers	Cisco Catalyst 3560 Series IP Services Part Numbers	Cisco Catalyst 3560 Series IP Base Part Numbers	Cisco Catalyst 2970 Series Part Numbers
• 3750-AISK9-LIC-B	• 3750-48TS-E	• 3750-48TS-S	• 3560-24TS-E	• 3560-24TS-S	• 2970G-24T-E
• 3750-AISK9-LIC-S	• 3750-24TS-E	• 3750-24TS-S	• 3560-48TS-E	• 3560-48TS-S	• 2970G-24TS-E
• 3750G-AISK9-LIC-B	• 3750G-24T-E	• 3750G-24T-S	• 3560-48PS-E	• 3560-48PS-S	
• 3750G-AISK9-LIC-S	• 3750G-48TS-E	• 3750G-48TS-S	• 3560-24PS-E	• 3560-24PS-S	
• 3750G48-AISK9LIC-B	• 3750G-24TS-E	• 3750G-24TS-S	• 3560G-48PS-E	• 3560G-48PS-S	
• 3750G48-AISK9LIC-S	• 3750G-12S-E	• 3750G-12S-S	• 3560G-24PS-E	• 3560G-24PS-S	
• 3560-AISK9-LIC-B	• 3750G-16TD	• 3750G-16TD	• 3560G-48TS-E	• 3560G-48TS-S	

Cisco Catalyst 3750 and Catalyst 3560 Series License CD Part Numbers	Cisco Catalyst 3750 Series IP Services Part Numbers	Cisco Catalyst 3750 Series IP Base Part Numbers	Cisco Catalyst 3560 Series IP Services Part Numbers	Cisco Catalyst 3560 Series IP Base Part Numbers	Cisco Catalyst 2970 Series Part Numbers
<ul style="list-style-type: none"> • 3560-AISK9-LIC-S • 3560G-AISK9-LIC-B • 3560G-AISK9-LIC-S 	<ul style="list-style-type: none"> • 3750-48PS-E • 3750-24PS-E • 3750G-24TS-1U-E • 3750G-24PS-E • 3750G-48PS-E 	<ul style="list-style-type: none"> • 3750-48PS-S • 3750-24PS-S • 3750G-24TS-1U-S • 3750G-24PS-S • 3750G-48PS-S 	<ul style="list-style-type: none"> • 3560G-24TS-E 	<ul style="list-style-type: none"> • 3560G-24TS-S 	

Table 3.

Cisco Catalyst 3550 Series EMI Part Numbers	Cisco Catalyst 3550 Series SMI Part Numbers
<ul style="list-style-type: none"> • 3550-12G Switch • 3550-12T Switch • 3550-24-EMI Switch • 3550-24 PWR Switch EMI • 3550-48-EMI Switch • 3550-24-FX-SMI Switch with EMI upgrade • 3550-24-DC-SMI Switch with EMI upgrade • CD-3550-EMI 	<ul style="list-style-type: none"> • 3550-24-SMI Switch • 3550-24PWR-SMI • 3550-48-SMI Switch • 3550-24-FX-SMI Switch • 3550-24-DC-SMI Switch

Table 4.

Cisco Catalyst 2960 Series Part Numbers	Cisco EtherSwitch Service Modules for Cisco 2600, 2800, 3700, 3800 Series Routers Part Numbers
<ul style="list-style-type: none"> • Cisco Catalyst 2960-24TC • Cisco Catalyst 2960-24TT • Cisco Catalyst 2960-48TC • Cisco Catalyst 2960-48TT • Cisco Catalyst 2960G-24TC 	<ul style="list-style-type: none"> • NME-16ES-1G • NME-16ES-1G-P • NME-X-23ES-1G • NME-X-23ES-1G-P • NME-XD-24ES-1S-P • NME-XD-48ES-2S-P

ADDITIONAL RESOURCES

Software Download

The following software is available for download:

- Cisco Catalyst 3750 Series software: <http://www.cisco.com/cgi-bin/tablebuild.pl/cat3750>
- Cisco Catalyst 3560 Series software: <http://www.cisco.com/cgi-bin/tablebuild.pl/cat3560>
- Cisco Catalyst 3550 Series software: <http://www.cisco.com/cgi-bin/tablebuild.pl/cat3550>
- Cisco Catalyst 2970 Series software: <http://www.cisco.com/cgi-bin/tablebuild.pl/cat2970>
- Cisco Catalyst 2960 Series software: <http://www.cisco.com/cgi-bin/tablebuild.pl/cat2960>

You must purchase the EMI/IP Services or Advanced IP Services software upgrade kit when upgrading a switch from SMI/IP Base to EMI/IP Services or Advanced IP Services software. Downloads of SMI/IP Base, EMI/IP Services, and Advanced IP Services files are monitored for adherence to this requirement.

Because of export restrictions on strong cryptography software, a separate image is required for the cryptographic features (SSH, SNMPv3, and Kerberos Protocol). These software images can be downloaded from the corresponding Triple Data Encryption Standard (3DES) area of the links provided in this section. Note that the Cisco Advanced IP Services license is available only in cryptographic format.

Product Information

Additional product information is available at the following URLs:

- Cisco Catalyst 3750 Series switches: <http://www.cisco.com/go/catalyst3750>
- Cisco Catalyst 3560 Series switches: <http://www.cisco.com/go/catalyst3560>
- Cisco Catalyst 3550 Series switches: <http://www.cisco.com/go/catalyst3550>
- Cisco Catalyst 2970 Series switches: <http://www.cisco.com/go/catalyst2970>
- Cisco Catalyst 2960 Series switches: <http://www.cisco.com/go/catalyst2960>
- Cisco Catalyst 3750, 3560, 3550, 2970, and 2960 series release notes:
 - <http://www.cisco.com/univercd/cc/td/doc/product/lan/cat3750/index.htm>
 - <http://www.cisco.com/univercd/cc/td/doc/product/lan/cat3560/index.htm>
 - <http://www.cisco.com/univercd/cc/td/doc/product/lan/c3550/index.htm>
 - <http://www.cisco.com/univercd/cc/td/doc/product/lan/cat2970/index.htm>
 - <http://www.cisco.com/univercd/cc/td/doc/product/lan/cat2960/index.htm>
- Cisco EtherSwitch Service Modules for Cisco 2600, 2800, 3700,3800 Series Routers
http://www.cisco.com/en/US/products/ps5854/products_data_sheet0900aecd8028d15f.html

Support

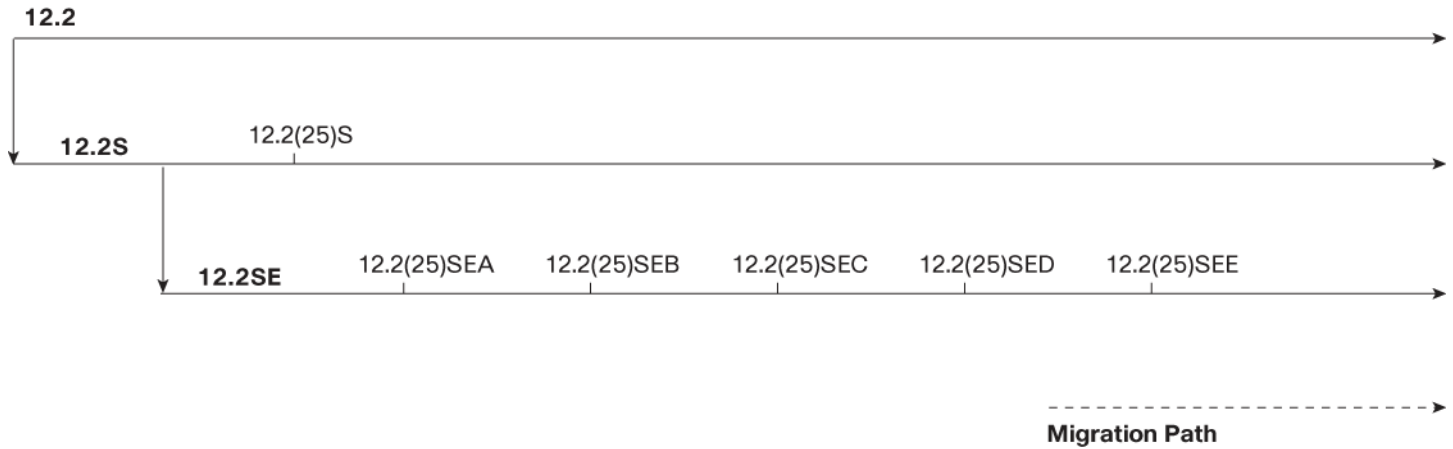
Cisco IOS Software Release 12.2(25)SED follows the standard Cisco support policy indicated at:

http://www.cisco.com/en/US/products/products_end-of-life_policy.html

Software Image Migration Guide

Figure 1 displays Cisco IOS Software Release 12.2(25)SED functions relative to the 12.2S and 12.2SE releases and identifies the recommended migration path.

Figure 1. Cisco IOS Software Release 12.2 Release Train



Note: The migration path for CGESM will be 12.2(25)SEE1, not 12.2(25)SEE.



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